AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A method of continuously coating and fabricating spiraled steel rebar product for concrete structures comprising the sequential steps of:

(a) supplying a linear uncoated rebar to a polymeric powder-coating unit and applying a substantially uniform coating layer of a polymeric material onto the uncoated rebar to form a linear coated rebar; and thereafter

(b) bending the linear coated rebar into a spiraled steel rebar product.

2. (Original) The method of claim 1, wherein step (b) includes bending the linear coated rebar by bringing it into contact with a series of bending wheels comprised of separated upstream and downstream bending wheels and a central bending wheel which is disposed between and below said upstream and downstream bending wheels.

3. (Original) The method of claim 2, wherein step (b) is practiced using bending wheels which include a rubber-like tire mounted on a rigid rotatable wheel member.

4. (Original) The method of claim 3, wherein step (a) includes the sequential steps of (a1) heating the uncoated rebar to an elevated temperature sufficient to fuse an epoxy powder, (a2) surface-abrading the rebar to achieve a desired anchor profile for the epoxy powder, (a3) electrostatically spray coating the heated and uncoated rebar with the epoxy powder and allowing the epoxy powder to fuse to thereby form a coated rebar having a substantially uniform coating of epoxy, and thereafter (a4) curing the epoxy coating on the coated rebar.

5. (Original) The method of claim 4, wherein after step (a4) and before step (b), there is practiced subjecting the coated rebar to a water quench.

6. (Original) The method of claim 1 or 4, which further includes between steps (a) and (b) the step of determining defects in the epoxy coating.

7. (Original) The method of claim 4, wherein step (a1) is practiced by passing the uncoated rebar through an induction heater.

8. (Original) The method of claim 7, wherein the rebar is heated to a temperature of at least about 450^0F.

9. (Original) The method of claim 4, wherein prior to step (a1), there is practiced the step of uncoiling the uncoated rebar from a supply coil thereof.

10. (Original) The method of claim 9, further comprising prior to step (a1), the steps of (a4) straightening the uncoiled and uncoated rebar, and (a5) cleaning an exterior surface of the uncoiled and uncoated rebar.

11. (Original) A system for the continuous coating and fabrication of spiraled steel rebar product for concrete structures comprising:

(a) a polymeric powder-coating unit which receives uncoated linear rebar and applies a substantially uniform coating layer of a polymeric material onto exterior surface of the uncoated rebar to form a linear coated rebar; and

(b) a bending unit for bending the linear coated rebar into a spiraled steel rebar product.

12. (Original) The system of claim 11, wherein the bending unit includes a series of bending wheels which contact the linear coated rebar during bending, said series of bending wheels being comprised of separated upstream and downstream bending wheels and a central bending wheel which is disposed between and below said upstream and downstream bending wheels.

13. (Original) The system of claim 12, wherein the upstream, downstream and central bending wheels include a rubber-like tire mounted on a rigid rotatable wheel member.

14. (Original) The system of claim 13, which further comprises (a1) a heating unit for heating the uncoated rebar to an elevated temperature sufficient to fuse an epoxy powder, and (a2) a coating unit for electrostatically spray coating the heated and uncoated rebar with the epoxy powder and allowing the epoxy powder to fuse to thereby form a coated rebar having a substantially uniform coating of epoxy.

15. (Original) The system of claim 14, further comprising a quench cabinet downstream of said coating unit for spraying the coated rebar with a water quench.

16. (Original) The system of claim 11 or 15, which further includes a coating defect detection system for determining defects in the epoxy coating.

17. (Original) The system of claim 14, wherein the heating unit includes an induction heater.

18. (Original) The system of claim 17, wherein the inducting heater is capable of heating the uncoated rebar is heated to a temperature of at least about 450^0F.

19. (Original) The system of claim 14, comprising a rebar straightener for straightening uncoated rebar which is uncoiled from a supply coil thereof.

20. (Original) The system of claim 11, wherein the bending unit includes a support spool which is connected to and extends coaxially outwardly from the central bending wheel in a cantilevered manner.

21. (New) A method of continuously coating and fabricating spiraled steel rebar product for concrete structures comprising the steps of:

(a) providing a supply coil of uncoated rebar;

(b) uncoiling the uncoated rebar from the supply coil thereof and removing coil-shape memory from the uncoiled and uncoated rebar to provide linear uncoated rebar;

(c) supplying the linear uncoated rebar to a polymeric powder-coating unit and applying a substantially uniform coating layer of a polymeric coating material onto the uncoated rebar to form a linear coated linear rebar; and thereafter

(d) bending the linear coated rebar into a spiraled steel rebar product.

22. (New) The method of claim 21, further comprising heating the uncoated rebar to an elevated temperature sufficient to fuse a polymeric powder.

23. (New) The method of claim 21, further comprising subjecting the uncoated rebar to surface abrasion to achieve a desired anchor profile for the polymeric coating material.

24. (New) The method of claim 23, wherein step (c) is practiced by electrostatically spray-coating the uncoated rebar with an epoxy.

25. (New) The method of claim 24, wherein prior to electrostatically spray-coating the uncoated rebar, there is practiced the steps of (i) abrading the uncoated rebar surface to achieve a desired anchor profile for the epoxy, and (ii) heating the uncoated rebar.

26. (New) The method of claim 25, comprising curing the epoxy coating on the coated rebar.

27. (New) The method of claim 26, comprising after curing, subjecting the coated rebar to a water quench.

28. (New) The method of claim 26, further comprising testing the coated rebar for coating defects.

29. (New) The method of claim 28, wherein said step of testing the coated rebar comprises bringing the coated rebar into contact with wet sponge material charged with an electrical potential.

30. (New) The method of claim 29, wherein said step of testing the coated rebar comprises generating an alarm in response to detection of a coating defect by the electrically charged wet sponge material.

31. (New) A system for continuously coating and fabricating spiraled steel rebar product for concrete structures comprising:

(a) a rebar straightener for uncoiling uncoated rebar from a supply coil thereof and removing coil-shape memory from the uncoiled and uncoated rebar to provide linear uncoated rebar;

(b) a polymeric powder-coating unit for applying a substantially uniform coating layer of a polymeric coating material onto the uncoated linear rebar to form a linear coated rebar; and

(c) a bending unit for bending the linear coated rebar into a spiraled steel rebar product.

32. (New) The system of claim 31, further comprising a heating unit for heating the uncoated rebar to an elevated temperature sufficient to fuse a polymeric powder.

33. (New) The system of claim 32, further comprising an abrading unit for abrading the surface of the uncoated linear rebar to achieve a desired anchor profile for the polymeric coating material.

34. (New) The system of claim 33, wherein said polymeric powder-coating unit comprises an electrostatic spray-coating nozzle.

35. (New) The system of claim 31, comprising upstream of said powder-coating unit (i) an abrader for abrading the uncoated rebar surface to achieve a desired anchor profile for the polymeric coating material, and (ii) a heater for heating the uncoated rebar.

36. (New) The system of claim 31, further comprising a curing unit for curing the epoxy coating on the coated rebar.

37. (New) The system of claim 36, wherein said curing unit comprises a quench cabinet for subjecting the coated rebar to a water quench.

38. (New) The system of claim 31, further comprising a testing unit for testing the coated rebar for coating defects.

39. (New) The system of claim 38, wherein testing unit comprises wet sponge material, and an electrical potential generator connected electrically to said wet sponge material for charging the wet sponge material with an electrical potential.

40. (New) The system of claim 39, wherein said testing unit further comprises an alarm unit which generates an alarm in response to detection of a coating defect by the electrically charged wet sponge material.